Commonwealth of Kentucky
Environmental and Public Protection Cabinet
Department for Environmental Protection
Division for Air Quality
803 Schenkel Lane
Frankfort, Kentucky 40601
(502) 573-3382

Draft

AIR QUALITY PERMIT

Issued under 401 KAR 52:020

Permittee Name:	**Owensboro Municipal Utilities**
Mailing Address:	**P.O. Box 806, Owensboro, Kentucky 42302**
Source Name:	**Elmer Smith Station**
Mailing Address:	**P.O. Box 806, Owensboro, Kentucky 42302**
Source Location:	**4301 U.S. Highway 60E, Owensboro, Kentucky**
Permit Number:	**V-04-050**
Source A. I. #:	**942**
Activity #:	**20040001**
Review Type:	**Renewal**
Source ID #:	**21-059-00027**
ORIS Code:	**1374**
Regional Office:	**Owensboro Region** **3032 Alvey Park Dr. W., STE 700** **Owensboro, Kentucky 42303-2191** **(270) 687-7304**
County:	**Daviess**
Application Complete Date:	**8/18/2004**
Issuance Date:	
Revision Date:	
Expiration Date:	

John S. Lyons, Director
Division for Air Quality

Revised 10/19/05

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Rev #	Permit Number	Log or Activity#	Complete Date	Issuance Date	Summary of Action
----	**V-97-011**	**E934**	**2/12/1997**	**9/29/1999**	**Initial Title V**
-----	**AR-96-09**	-----	-----	**12/11/1996**	**Acid Rain, Phase II**
-----	**AR-98-003**	**50283 (F479)**	**2/15/1998**	**3/2/1999**	**Acid Rain, Phase II, revised SO2 allocations and NO_X emissions standard.**
	V-04-050	**APE20040001**	**8/18/2004**		**Title V, Acid Rain Renewal**

SECTION A – PERMIT AUTHORIZATION

Pursuant to a duly submitted application the Kentucky Division for Air Quality hereby authorizes the operation of the equipment described herein in accordance with the terms and conditions of this permit. This permit has been issued under the provisions of Kentucky Revised Statutes Chapter 224 and regulations promulgated pursuant thereto.

The permittee shall not construct, reconstruct, or modify any affected facilities without first submitting a complete application and receiving a permit for the planned activity from the permitting authority, except as provided in this permit or in 401 KAR 52:020, Title V Permits.

Issuance of this permit does not relieve the permittee from the responsibility of obtaining any other permits, licenses, or approvals required by this Cabinet or any other federal, state, or local agency.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS

Emissions Unit 01 (Unit #1) Indirect Heat Exchanger

Description:
Cyclone furnace coal-fired, indirect heat exchanger equipped with over-fire air, electrostatic precipitator, selective catalytic reduction, and flue gas desulfurization.

Primary Fuel:	Coal
Start-up Fuel:	#2 fuel-oil is used for startup and flame stabilization.
Secondary Fuel:	Shot coke and sponge coke (30% mixture of either with coal)
Tertiary Fuel:	2 - 4% blend of Tire Derived Fuel (TDF) with coal
Maximum continuous rating:	1507 mmBtu/hour
Construction commenced:	1964

Applicable Regulations:

401 KAR 52:060, Acid rain permits, incorporating by reference the Federal Acid Rain provisions 40 CFR Parts 72 to 78
401 KAR 51:160, NO_X requirements for large utility and industrial boilers, incorporating by reference 40 CFR 96
401 KAR 61:015, Existing indirect heat exchangers applicable to an emission unit with a capacity of more than 250 mmBtu per hour and commenced before August 17, 1971
40 CFR Part 64, Compliance Assurance Monitoring (for SO_2 and PM/Opacity).

1. **Operating Limitations:**

None.

2. **Emission Limitations:**

a) Pursuant to 401 KAR 61:015, Section 4(1), particulate matter emissions shall not exceed 0.17 lb/mmBtu based on a three-hour-average.

b) Pursuant to 401 KAR 61:015, Section 4(2), emissions shall not exceed 20 percent opacity based on a six-minute average except:

(i) that a maximum of 40 percent opacity is allowed for a period or aggregate of periods not more than one six consecutive minute period in any sixty minutes and;

(ii) when building a new fire for the period required to bring the boiler up to operating conditions provided the method used is that recommended by the manufacturer and the time does not exceed the manufacturer's recommendations.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

c) Pursuant to 401 KAR 61:015, Section 5(1), sulfur dioxide emissions shall not exceed 6.0 lbs/mmBtu based on a twenty-four-hour average.

3. Testing Requirements:

a) In accordance with subsection 4(b), the permittee shall submit a schedule within six months from the date of issuance of this permit to conduct testing within one year following the issuance of this permit to establish the correlation between opacity and particulate emissions. This testing shall be conducted in accordance with 401 KAR 50:045, Performance Tests, and pursuant to 40 CFR 64.4(c)(1), the testing shall be conducted under conditions representative of maximum emissions potential under anticipated operating conditions at the pollutant-specific emissions unit.

b) If no additional stack tests are performed pursuant to subsection 4(b), the permittee shall conduct a performance test for particulate emissions by the start of the fourth year of this permit to demonstrate compliance with the applicable standard.

c) The permittee shall determine the opacity of emissions from the stack by EPA Reference Method 9 weekly, or more frequently if requested by the Division.

4. Specific Monitoring Requirements:

a) Pursuant to 401 KAR 61:005, Section 3, Performance Specification 1 of 40 CFR 60, Appendix B, and 401 KAR 52:020, Section 10, a continuous opacity monitoring (COM) system shall conform to requirements of these sections which include installing, calibrating, operating, and maintaining the continuous monitoring system for accurate opacity measurement. Pursuant to 40 CFR 64.3(d), the COM shall be used to satisfy Compliance Assurance Monitoring (CAM) requirements. Excluding the startup, shut down, and once per hour exemption periods, if any six-minute average opacity value exceeds the opacity standard, the permittee shall, as appropriate:

(i) accept the concurrent readout from the COM and perform an inspection of the control equipment and make any necessary repairs or;

(ii) determine opacity using Reference Method 9 if emissions are visible, inspect the COM and/or the control equipment, and make any necessary repairs. If a Method 9 cannot be performed, the reason for not performing the test shall be documented.

b) Pursuant to 401 KAR 52:020, Section 10, to meet the monitoring requirement for particulate matter, the permittee shall use a COM. Pursuant to 40 CFR 64.4(a)(1) and the CAM plan filed on July 29, 2005, opacity shall be used as an indicator of particulate matter emissions in conjunction with an annual Reference Method 5 or 17. Pursuant to 40 CFR Part 64.4(c)(1), testing shall be conducted to establish the level of opacity that will be used as an indicator of

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

particulate matter emissions. The opacity indicator level shall be established at a level that provides reasonable assurance that particulate matter emissions are in compliance when opacity is equal to or less than the indicator level.

(i) If any six-minute average opacity (averaged over a period of three hours) value exceeds the opacity indicator level, the permittee shall, as appropriate, initiate an inspection of the control equipment and/or the COM system and make any necessary repairs.

(ii) If five (5) percent or greater of COM data (data averaged over six-minute periods) recorded in a calendar quarter show excursions above the opacity indicator level, the permittee shall perform a stack test in the following calendar quarter to demonstrate compliance with the particulate standard while operating at representative conditions. The permittee shall submit a compliance test protocol as required by Section G(a)(17) of this permit before conducting the test. The Division may waive this testing requirement upon a demonstration that the cause(s) of the excursions have been corrected, or may require stack tests at any time pursuant to 401 KAR 50:045, Performance Tests.

c) Pursuant to 401 KAR 61:005, Section 3 and Performance Specification 2 of Appendix B to 40 CFR 60 or 40 CFR 75, Appendix A, and 401 KAR 52:020, Section 10, continuous emission monitoring systems (CEMS) shall be installed, calibrated, maintained, and operated for measuring sulfur dioxide emissions and either oxygen or carbon dioxide emissions. Pursuant to 40 CFR 64.3(d), the CEMS shall be used to satisfy CAM requirements. If any 24-hour average sulfur dioxide value exceeds the standard, the permittee shall, as appropriate, initiate an investigation of the cause of the exceedance and/or the CEM system and make any necessary repairs or take corrective actions as soon as practicable.

d) Pursuant to 401 KAR 61:015, Section 6(1), the sulfur content of solid fuels, as burned shall be determined in accordance with methods specified by the Division.

e) Pursuant to 401 KAR 61:015, Section 6(3) the rate of each fuel burned shall be measured daily and recorded. The heating value and ash content of fuels shall be ascertained at least once per week and recorded. The average electrical output, and the minimum and maximum hourly generation rate shall be measured and recorded daily.

f) Pursuant to 401 KAR 61:005, Section 3(5), the Division may provide a temporary exemption from the monitoring and reporting requirements of 401 KAR 61:005, Section 3, for the continuous monitoring system during any period of monitoring system malfunction, provided that the source owner or operator shows, to the Division's satisfaction, that the malfunction was unavoidable and is being repaired as expeditiously as practicable.

5. Specific Record Keeping Requirements:

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

a) Records shall be kept in accordance with 401 KAR 61:005, Section 3(16)(f) and 61:015, Section 6, with the exception that the records shall be maintained for a period of five years.

b) The permittee shall maintain the records of the following:
(i) data collected either by the continuous monitoring systems or as necessary to convert monitoring data to the units of the applicable standard;
(ii) the results of all compliance tests;
(iii) percentage of the COM data (excluding startup, shutdown, and malfunction data) showing excursions above the opacity standard and the opacity indicator level;
(iv) the records of the fuel analysis;
(v) the rate of fuel burned for each fuel on a daily basis;
(vi) the heating value and ash content on a weekly basis; and
(vii) the average electrical output and the minimum and maximum hourly generation rate on a daily basis.

6. Specific Reporting Requirements:

Pursuant to 401 KAR 61:005, Section 3(16), minimum data requirements that follow shall be maintained and reported quarterly by Division specified format. All quarterly reports shall be postmarked by the thirtieth (30th) day following the end of each calendar quarter.

(i) Owners or operators of facilities required to install continuous monitoring systems shall submit a written report of excess emissions, including a description of the nature and cause of the excess emissions if known. The averaging period used for data reporting should correspond to the averaging period specified in the emission test method used to determine compliance with an emission standard for the pollutant/source category in question.

(ii) For opacity measurements, the summary shall consist of :

1) the magnitude in percent opacity of six (6) minute averages of opacity greater than the opacity standard for each hour of operation of the facility. Average values may be obtained by integration over the averaging period or by arithmetically averaging a minimum of four (4) equally spaced, instantaneous opacity measurements per minute. Any time period exempted shall be considered before determining the excess average opacity. Opacity data shall be reported in electronic files only.

2) a report of the number of excursions (excluding any exempted time periods) above the opacity indicator level, date and time of excursions, opacity value of the excursions, and percentage of the COM data showing excursions above the opacity indicator level.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

(iii) For gaseous measurements, the summary shall consist of hourly averages in the units of the applicable standard. The hourly averages shall not appear in the written summary, but shall be provided in electronic files only.

(iv) The date and time identifying each period during which the continuous monitoring system was inoperative, except for zero and span checks, and the nature of system repairs or adjustments shall be reported. Proof of continuous monitoring system performance whenever system repairs or adjustments have been made is required.

(v) When no excess emissions have occurred and the continuous monitoring system(s) have not been inoperative, repaired, or adjusted, such information shall be included in the report.

7. Specific Control Equipment Operating Conditions:

a) The electrostatic precipitator (ESP), SO2 scrubber (wet limestone), overfire air system (OFA) and selective catalytic reduction (SCR) system shall be operated as necessary to maintain compliance with permitted emission limitations, consistent with manufacturer's specifications and/or good operating practices.

b) Records regarding the maintenance of the control equipment shall be maintained.

c) See Section E for further requirements.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Emissions Unit 02 (Unit #2) Indirect Heat Exchanger

Description:
Pulverized-coal tangentially-fired, dry bottom indirect heat exchanger equipped with an electrostatic precipitator, low NO_X burners and separated overfire air, selective non-catalytic reduction, and flue gas desulfurization.

Primary Fuel:	Coal
Start-up Fuel:	Propane is utilized as a startup fuel for flame stabilization.
Maximum continuous rating:	2566.4 mmBtu/hour
Construction commenced:	1971

Applicable Regulations:

401 KAR 52:060, Acid rain permits, incorporating by reference the Federal Acid Rain provisions 40 CFR Parts 72 to 78
401 KAR 51:160, NO_X requirements for large utility and industrial boilers, incorporating by reference 40 CFR 96
401 KAR 61:015, Existing indirect heat exchangers, applicable to an emission unit with a capacity of more than 250 mmBtu per hour and commenced before August 17, 1971
40 CFR Part 64, Compliance Assurance Monitoring (for SO_2, NO_X and PM/Opacity).

1. Operating Limitations:

Natural gas may only be fired when the coal pulverizer is out of service. The natural gas shall not run concurrently with the pulverizer, and there shall be no increase in heat input rate the unit. The amount of natural gas combusted shall be limited to 221 MMSCF to recover the lost input from pulverizer mill outages.

2. Emission Limitations:

a) Pursuant to 401 KAR 61:015, Section 4(1), particulate matter emissions shall not exceed 0.13 lb/mmBtu based on a three-hour-average.

b) Pursuant to 401 KAR 61:015, Section 4(2), emissions shall not exceed 20 percent opacity based on a six-minute average except:

(i) that a maximum of 40 percent opacity is allowed for a period or aggregate of periods not more than one six consecutive minute period in any sixty minutes and;

(ii) when building a new fire for the period required to bring the boiler up to operating conditions provided the method used is that recommended by the manufacturer and the time does not exceed the manufacturer's recommendations.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

c) Pursuant to 401 KAR 61:015, Section 5 (1), sulfur dioxide emissions shall not exceed 6.0 lbs/mmBtu based on a twenty-four-hour average. .

3. Testing Requirements:

a) In accordance with subsection 4(b), the permittee shall submit a schedule within six months from the date of issuance of this permit to conduct testing within one year following the issuance of this permit to establish the correlation between opacity and particulate emissions. This testing shall be conducted in accordance with 401 KAR 50:045, Performance Tests, and pursuant to 40 CFR 64.4(c)(1), the testing shall be conducted under conditions representative of maximum emissions potential under anticipated operating conditions at the pollutant-specific emissions unit.

b) If no additional stack tests are performed pursuant to paragraph 4(b) of this section, the permittee shall conduct a performance test for particulate emissions by the start of the fourth year of this permit to demonstrate compliance with the applicable standard.

c) The permittee shall determine the opacity of emissions from the stack by EPA Reference Method 9 weekly, or more frequently if requested by the Division.

4. Specific Monitoring Requirements:

a) Pursuant to 401 KAR 61:005, Section 3, Performance Specification 1 of 40 CFR 60, Appendix B, and 401 KAR 52:020, Section 10, a continuous opacity monitoring (COM) system shall conform to requirements of these sections which include installing, calibrating, operating, and maintaining the continuous monitoring system for accurate opacity measurement. Pursuant to 40 CFR 64.3(d), the COM shall be used to satisfy Compliance Assurance Monitoring (CAM) requirements. Excluding the startup, shut down, and once per hour exemption periods, if any six-minute average opacity value exceeds the opacity standard, the permittee shall, as appropriate:

(i) accept the concurrent readout from the COM and perform an inspection of the control equipment and make any necessary repairs or;

(ii) determine opacity using Reference Method 9 if emissions are visible, inspect the COM, the control equipment, and make any necessary repairs. If a Method 9 cannot be performed, the reason for not performing the test shall be documented.

b) Pursuant to 401 KAR 52:020, Section 10, to meet the monitoring requirement for particulate matter, the permittee shall use a COM. Pursuant to 40 CFR 64(a)(1) and the CAM plan filed on July 29, 2005, opacity shall be used as an indicator of particulate matter emissions in conjunction with an annual Reference Method 5 or 17. Pursuant to 40 CFR Part 64.4(c)(1), testing shall be conducted to establish the level of opacity that will be used as an indicator of

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

particulate matter emissions. The opacity indicator level shall be established at a level that provides reasonable assurance that particulate matter emissions are in compliance when opacity is equal to or less than the indicator level.

(i) If any six-minute average opacity (averaged over a period of three hours) value exceeds the opacity indicator level, the permittee shall, as appropriate, initiate an inspection of the control equipment and/or the COM system and make any necessary repairs.

(ii) If five (5) percent or greater of COM data (data averaged over six-minute periods) recorded in a calendar quarter show excursions above the opacity indicator level, the permittee shall perform a stack test in the following calendar quarter to demonstrate compliance with the particulate standard while operating at representative conditions. The permittee shall submit a compliance test protocol as required by Section G(a)(17) of this permit before conducting the test. The Division may waive this testing requirement upon a demonstration that the cause(s) of the excursions have been corrected, or may require stack tests at any time pursuant to 401 KAR 50:045, Performance Tests.

c) Pursuant to 401 KAR 61:005, Section 3 and Performance Specification 2 of Appendix B to 40 CFR 60 or 40 CFR 75, Appendix A, and 401 KAR 52:020, Section 10, continuous emission monitoring systems (CEMS) shall be installed, calibrated, maintained, and operated for measuring nitrogen oxides, sulfur dioxide emissions and either oxygen or carbon dioxide emissions. Pursuant to 40 CFR 64.3(d), the CEMS shall be used to satisfy CAM requirements. If any 24-hour average sulfur dioxide value exceeds the standard, the permittee shall, as appropriate, initiate an investigation of the cause of the exceedance and/or the CEM system and make any necessary repairs or take corrective actions as soon as practicable.

d) Pursuant to 401 KAR 61:015, Section 6(1), the sulfur content of solid fuels, as burned shall be determined in accordance with methods specified by the Division.

e) Pursuant to 401 KAR 61:015, Section 6(3) the rate of each fuel burned shall be measured daily and recorded. The heating value and ash content of fuels shall be ascertained at least once per week and recorded. The average electrical output, and the minimum and maximum hourly generation rate shall be measured and recorded daily.

f) Pursuant to 401 KAR 61:005, Section 3(5), the Division may provide a temporary exemption from the monitoring and reporting requirements of 401 KAR 61:005, Section 3, for the continuous monitoring system during any period of monitoring system malfunction, provided that the source owner or operator shows, to the Division's satisfaction, that the malfunction was unavoidable and is being repaired as expeditiously as practicable.

5. Specific Record Keeping Requirements:

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

a) Records shall be kept in accordance with 401 KAR 61:005, Section 3(16)(f) and 61:015, Section 6, with the exception that the records shall be maintained for a period of five years.

b) The permittee shall maintain the records of the following:
(i) data collected either by the continuous monitoring systems or as necessary to convert monitoring data to the units of the applicable standard;
(ii) the results of all compliance tests;
(iii) percentage of the COM data (excluding startup, shutdown, and malfunction data) showing excursions above the opacity standard and the opacity indicator level;
(iv) the records of the fuel analysis;
(v) the rate of fuel burned for each fuel on a daily basis;
(vi) the heating value and ash content on a weekly basis; and
(vii) the average electrical output and the minimum and maximum hourly generation rate on a daily basis.

6. Specific Reporting Requirements:

Pursuant to 401 KAR 61:005, Section 3(16), minimum data requirements that follow shall be maintained and reported quarterly by Division specified format. All quarterly reports shall be postmarked by the thirtieth (30th) day following the end of each calendar quarter.

(i) Owners or operators of facilities required to install continuous monitoring systems shall submit a written report of excess emissions, including a description of the nature and cause of the excess emissions if known. The averaging period used for data reporting should correspond to the averaging period specified in the emission test method used to determine compliance with an emission standard for the pollutant/source category in question.

(ii) For opacity measurements, the summary shall consist of :

1) the magnitude in percent opacity of six (6) minute averages of opacity greater than the opacity standard for each hour of operation of the facility. Average values may be obtained by integration over the averaging period or by arithmetically averaging a minimum of four (4) equally spaced, instantaneous opacity measurements per minute. Any time period exempted shall be considered before determining the excess average opacity. Opacity data shall be reported in electronic files only.

2) a report of the number of excursions (excluding any exempted time periods) above the opacity indicator level, date and time of excursions, opacity value of the excursions, and percentage of the COM data showing excursions above the opacity indicator level.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

(iii) For gaseous measurements, the summary shall consist of hourly averages in the units of the applicable standard. The hourly averages shall not appear in the written summary, but shall be provided in electronic files only.

(iv) The date and time identifying each period during which the continuous monitoring system was inoperative, except for zero and span checks, and the nature of system repairs or adjustments shall be reported. Proof of continuous monitoring system performance whenever system repairs or adjustments have been made is required.

(v) When no excess emissions have occurred and the continuous monitoring system(s) have not been inoperative, repaired, or adjusted, such information shall be included in the report.

7. Specific Control Equipment Operating Conditions:

a) The electrostatic precipitator (ESP), SO2 scrubber (wet limestone), overfire air system (OFA) and selective catalytic reduction (SCR) system shall be operated as necessary to maintain compliance with permitted emission limitations, consistent with manufacturer's specifications and/or good operating practices.

b) Records regarding the maintenance of the control equipment shall be maintained.

c) See Section E for further requirements.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Emissions Unit 03 Indirect Heat Exchanger

Description:
No. 2 fuel-oil tangentially fired auxiliary indirect heat exchanger.
Primary Fuel: No. 2 Fuel Oil
Maximum continuous rating: 8.3 mmBtu/hour
Construction commenced: 1964

Applicable Regulations:

401 KAR 61:015, Existing indirect heat exchangers, applicable to an emission unit with a capacity of less than 250 mmBtu per hour and commenced before April 9, 1972.

1. **Operating Limitations:**

None.

2. **Emission Limitations:**

a) Pursuant to 401 KAR 61:015, Section 4(1), particulate emissions shall not exceed 0.13 lb/mmBtu based on a three-hour average. Compliance with the allowable particulate standard may be demonstrated by calculating particulate emissions using fuel oil usage rates, fuel analysis, and emission factor information:

Emissions (lb/mmBtu) = (USEPA approved factor or AP-42 emissions factor: 2 lbs PM / 1000 gallons) / (Heating value from fuel analysis in mmBtu/1000 gallons)

b) Pursuant to 401 KAR 61:015, Section 4(2), emissions shall not exceed 20 percent opacity based on a six-minute average except:

(i) that a maximum of 40 percent opacity is allowed for a period or aggregate of periods not more than one six consecutive minute period in any sixty minutes and;

(ii) when building a new fire for the period required to bring the boiler up to operating conditions provided the method used is that recommended by the manufacturer and the time does not exceed the manufacturer's recommendations.

c) Pursuant to 401 KAR 61:015, Section 5(1), sulfur dioxide emissions shall not exceed 0.25 lb/mmBtu based on a twenty-four-hour average. Compliance with the allowable sulfur dioxide standard may be demonstrated by calculating sulfur dioxide emissions using fuel oil usage rates, fuel analysis, and emission factor information:

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Emissions (lb/mmBtu) = 142S lbs/1000 gallons*)/(Heating value from fuel analysis in mmBtu/1000 gallons)
* Note: AP-42 emission factor where S = percent sulfur or use other USEPA approved factor.

3. Testing Requirements:

None.

4. Specific Monitoring Requirements:

a) In accordance with 401 KAR 61:015, Section 6(2), the permittee shall monitor the heat content and sulfur content of the fuel oil burned on a monthly basis. The permittee may use fuel supplier certification to meet this requirement.

b) The permittee shall perform a qualitative visual observation of the opacity of emissions from the stack on a weekly basis and maintain a log of the observations when the emission unit is in operation. If visible emissions are seen, the permittee shall determine the opacity of emissions by Reference Method 9 and instigate an inspection of the unit for any necessary repairs.

c) The permittee shall monitor the fuel oil consumption rate on a monthly basis.

5. Specific Record Keeping Requirements:

a) Records documenting the amount of fuel oil consumption shall be maintained.

b) Records documenting the sulfur content and heating value of the fuel oil shall be maintained.

6. Specific Reporting Requirements:

See Section F.

7. Specific Control Equipment Operating Conditions:

See Section E.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Emissions Unit 04 Ash Handling: Number 2 Ash Silo

Description:
Silo vent and air receiver / separator equipped with particulate bag-filters.
Maximum continuous rating: 30 tons/hour
Construction commenced: 1993

Applicable Regulations:

401 KAR 59:010, New process operations, applicable to emissions units that commenced construction on or after July 2, 1975.

1. **Operating Limitations:**

   None.

2. **Emission Limitations:**

   a) Pursuant to 401 KAR 59:010, Section 3(2), particulate matter emissions into the open air shall not exceed $[3.59(P)^{0.62}]$ pounds per hour based on a three-hour average where P is the operating rate in tons per hour.

   b) Pursuant to 401 KAR 59:010, Section 3(1)(a), any emissions into the open air shall not equal or exceed twenty (20) percent opacity based on a six-minute average.

3. **Testing Requirements:**

   None.

4. **Specific Monitoring Requirements:**

   a) The permittee shall perform a qualitative visual observation of the opacity of emissions from the stack on a weekly basis and maintain a log of the observations. If emissions are visible, the permittee shall determine the opacity of emissions by US EPA Reference method 9 and initiate an inspection of the control equipment for any necessary repairs.

   b) The permittee shall monitor the processing rate and hours of operation on a weekly basis.

5. **Specific Record Keeping Requirements:**

   a) Records of the weekly ash processed and weekly hours of operation shall be maintained.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

b) Records of the weekly log of qualitative visual observation of opacity and if any were taken, of the opacity determined by Reference Method 9, and repairs that were made due to any opacity reading which exceeded the standard shall be maintained.

6. Specific Reporting Requirements:

See Section F.

7. Specific Control Equipment Operating Conditions:

a) The particulate bag filters shall be operated as necessary to maintain compliance with permitted emission limitations in accordance with manufacturer's specifications and/or standard operating practices.

b) Records regarding the maintenance of the particulate bag filters shall be maintained.

c) See Section E.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Emissions Unit 05 Number 1 Ash Silo

Description:
Silo vent and air receiver/separator equipped with bag filters.
Operating rate: 30 tons/hour
Construction commenced: 1964

Applicable Regulations:

401 KAR 61:020, Existing process operations, applicable to an emissions unit that commenced prior to July 2, 1975.

1. **Operating Limitations:**

   None.

2. **Emission Limitations:**

   a) Pursuant to 401 KAR 61:020, Section 3(2), particulate matter emissions shall not exceed $[4.10(P)^{0.67}]$ pounds per hour based on a three-hour average where P is the operating rate in tons per hour.

   b) Pursuant to 401 KAR 61:020, Section 3(1)(a), any continuous emission(s) into the open air shall not equal or exceed forty percent opacity based on a six-minute average.

3. **Testing Requirements:**

   None.

4. **Specific Monitoring Requirements:**

   a) The permittee shall perform a qualitative visual observation of the opacity of emissions from the stack on a weekly basis and maintain a log of the observations. If emissions from the stack are visible, the permittee shall determine the opacity of emissions by US EPA Reference method 9 and initiate an inspection of the control equipment for any necessary repairs.

   b) The permittee shall monitor the processing rate and hours of operation on a weekly basis.

5. **Specific Record Keeping Requirements:**

   a) Records of the weekly ash processed and weekly hours of operation shall be maintained.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

b) Records of the weekly log of qualitative visual observation of opacity and if any were taken, of the opacity determined by Reference Method 9, and repairs that were made due to any opacity reading which exceeded the standard shall be maintained.

6. Specific Reporting Requirements:

See Section F.

7. Specific Control Equipment Operating Conditions:

a) The particulate bag filters shall be operated as necessary to maintain compliance with permitted emission limitations in accordance with manufacturer's specifications and/or standard operating practices.

b) Records regarding the maintenance of the particulate bag filters shall be maintained.

c) See Section E.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Emissions Unit 06 Limestone Handling and Processing

Description:
Equipment Includes: 48 inch belt conveyor with two transfer points (hopper to 48 inch belt conveyor and 48 inch belt conveyor to 24 inch belt conveyor) and 24 inch belt conveyor (equipped with enclosures) with one transfer point (24 inch belt conveyor to silo, equipped with insertable dust filters).
Operating rate: 100 tons per hour.
Construction commenced: 1993

Applicable Regulations:

401 KAR 60:670, New nonmetallic mineral processing plants, incorporating by reference 40 CFR 60 (Subpart OOO), applies to each of the emissions units listed above, commenced after August 31, 1983.

1. **Operating Limitations:**

None.

2. **Emission Limitations:**

a) Pursuant to 40 CFR 60.672(a)(1), particulate emissions from stacks shall not exceed 0.05 g/dscm (0.022 gr/dscf) based on a three-hour average.

b) Pursuant to 40 CFR 60.672(a)(2), visible emissions from stacks shall not exceed seven percent (7%) opacity based on a three-hour average.

c) Pursuant to 40 CFR 60.672(b) visible emissions, excluding those from a stack, shall not to exceed ten percent (10 %) opacity.

3. **Testing Requirements:**

a) Pursuant to 40 CFR 60.675(b)(2) opacity from stacks will be determined EPA Reference Method 9 as specified in paragraph 4(a) of this section.

b) Pursuant to 40 CFR 60.675(b)(1), the permittee shall determine particulate matter concentration of emissions by EPA Reference Method 5 or 17.

c) Pursuant to 40 CFR 60.675(d), the permittee shall determine the opacity of fugitive emissions for any transfer point on a conveyor belt or any other affected facility enclosed in a building by EPA Reference Method 22 annually.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

4. Specific Monitoring Requirements:

a) The permittee shall perform a qualitative visual observation of the opacity of emissions from the stack on a weekly basis and maintain a log of the observations. If emissions are visible, the permittee shall determine the opacity of emissions by EPA Reference Method 9 and initiate an inspection of the control equipment for any necessary repairs.

b) The permittee shall monitor the amount of limestone processed.

c) The permittee shall inspect control equipment weekly and make repairs as necessary to assure compliance.

5. Specific Record Keeping Requirements:

a) Records of the lime and/or limestone processed shall be maintained for emission inventory purposes.

b) Records of the weekly log of qualitative visual observation of opacity and if any were taken, of the opacity determined by Reference Method 9, and repairs that were made due to any opacity reading which exceeded the standard shall be maintained.

6. Specific Reporting Requirements:

Pursuant to 401 KAR 60.670, incorporating by reference 40 CFR 60.676(f), the owner(s) or operator of any emissions unit shall submit written reports of the results of all performance tests conducted to demonstrate compliance with the standards of 40 CFR 60.672, including reports of opacity observations made using Method 22 to demonstrate compliance.

7. Specific Control Equipment Operating Conditions:

a) The enclosures shall be maintained as necessary to ensure compliance with permitted emission limitations, in accordance with manufacturer's specifications and/or standard operating practices.

b) Records regarding the maintenance and operation/use of the enclosures shall be maintained.

c) See Section E.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Emissions Unit 07 Limestone Crushing

Description:
Equipment Includes: Two limestone ball mills.
Operating rate: 40 tons per hour.
Construction commenced: 1993

Applicable Regulations:

401 KAR 60:670, New nonmetallic mineral processing plants, incorporating by reference 40 CFR 60 (Subpart OOO), applies to each of the emissions units listed above, commenced after August 31, 1983.

1. **Operating Limitations:**

   None.

2. **Emission Limitations:**

   Pursuant to 40 CFR 60.672(b), visible emissions shall not exceed ten (10) percent opacity.

3. **Testing Requirements:**

   Pursuant to 40 CFR 60.675(d), the permittee shall determine opacity of emissions by EPA Reference Method 22 annually.

4. **Specific Monitoring Requirements:**

   a) The permittee shall perform a qualitative visual observation of the opacity of emissions from the stack on a weekly basis and maintain a log of the observations. If emissions from the stack are visible, the permittee shall determine the opacity of emissions by EPA Reference Method 9 and initiate an inspection of the control equipment for any necessary repairs.

   b) The permittee shall monitor the amount of limestone processed per week.

   c) The permittee shall inspect control equipment weekly and make repairs as necessary to assure compliance.

5. **Specific Record Keeping Requirements:**

   a) Records of the limestone processed per week shall be maintained.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

b) Records of the weekly log of qualitative visual observation of opacity and if any were taken, of the opacity determined by Reference Method 9, and repairs that were made due to any opacity reading which exceeded the standard shall be maintained.

6. Specific Reporting Requirements:

Pursuant to 401 KAR 60.670, incorporating by reference 40 CFR 60.676(f), the owner(s) or operator of any emissions unit shall submit written reports of the results of all performance tests conducted to demonstrate compliance with the standards of 40 CFR 60.672, including reports of opacity observations made using Method 22 to demonstrate compliance.

7. Specific Control Equipment Operating Conditions:

a) The dust collector shall be operated as necessary to maintain compliance with permitted emission limitations, in accordance with manufacturer's specifications and/or standard operating practices.

b) Records regarding the maintenance and operation/use of the cyclone dust collector shall be maintained.

c) See Section E.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Emissions Unit 08 Limestone Conveying and Handling

Description:
Limestone truck/reclaim hopper (equipped with enclosures), haul roads (equipped with wet suppression equipment), and stockpiles (equipped with wet suppression equipment).
Operating rate: 300 tons/hour.
Construction commenced: 1993

Applicable Regulations:

401 KAR 63:010, Fugitive emissions is applicable to each affected facility which emits or may emit fugitive emissions and is not elsewhere subject to an opacity standard within the administrative regulations of the Division for Air Quality.

1. Operating Limitations:

a) Pursuant to 401 KAR 63:010, Section 3, reasonable precautions shall be taken to prevent particulate matter from becoming airborne. Such reasonable precautions shall include, when applicable, but not be limited to the following:

(i) Application and maintenance of asphalt, application of water, or suitable chemicals on roads, material stockpiles, and other surfaces which can create airborne dusts;

(ii) Installation and use of hoods, fans, and fabric filters to enclose and vent the handling of dusty materials, or the use of water sprays or other measures to suppress the dust emissions during handling;

(iii) Maintenance of paved roadways in a clean condition;

(iv) The prompt removal of earth or other material from a paved street which earth or other material has been transported thereto by trucking or other earth moving equipment or erosion by water;

(v) Installation and use of compaction or other measures to suppress the dust emissions during handling.

b) Pursuant to 401 KAR 63:010, Section 3, discharge of visible fugitive dust emissions beyond the property line is prohibited.

c) Pursuant to 401 KAR 63:010, Section 4, no one shall allow earth or other material being transported by truck or earth moving equipment to be deposited onto a paved street or roadway.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

2. Emission Limitations:

None.

3. Testing Requirements:

None.

4. Specific Monitoring Requirements:

The permittee shall monitor the amount of limestone received and processed.

5. Specific Record Keeping Requirements:

a) Records of limestone received and processed shall be maintained.

b) Annual records estimating tonnage hauled for plant roadways shall be maintained for emission inventory purposes.

6. Specific Reporting Requirements:

See Section F.

7. Specific Control Equipment Operating Conditions:

a) The source wet suppression control equipment shall be operated as necessary to maintain compliance with applicable requirements, in accordance with manufacturer's specifications and/or standard operating practices.

b) Records regarding the maintenance and operation of the wet suppression control equipment shall be maintained.

c) See Section E.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Emissions Unit 09 Coal Conveying and Handling

Description:
Equipment includes: Conveyors (equipped with enclosures), scales (equipped with enclosures), crushers (equipped with enclosures), stockpiles (equipped with wet suppression equipment), and haul roads (equipped with wet suppression equipment).
Operating Rate: 195 tons/hour
Construction commenced: 1964

Applicable Regulations:

401 KAR 63:010, Fugitive emissions is applicable to each affected facility which emits or may emit fugitive emissions and is not elsewhere subject to an opacity standard within the administrative regulations of the Division for Air Quality.

1. Operating Limitations:

a) Pursuant to 401 KAR 63:010, Section 3, reasonable precautions shall be taken to prevent particulate matter from becoming airborne. Such reasonable precautions shall include, when applicable, but not be limited to the following:

(i) Application and maintenance of asphalt, application of water, or suitable chemicals on roads, material stockpiles, and other surfaces which can create airborne dusts;

(ii) Installation and use of hoods, fans, and fabric filters to enclose and vent the handling of dusty materials, or the use of water sprays or other measures to suppress the dust emissions during handling;

(iii) Maintenance of paved roadways in a clean condition;

(iv) The prompt removal of earth or other material from a paved street which earth or other material has been transported thereto by trucking or other earth moving equipment or erosion by water;

(v) Installation and use of compaction or other measures to suppress the dust emissions during handling.

b) Pursuant to 401 KAR 63:010, Section 3, discharge of visible fugitive dust emissions beyond the property line is prohibited.

c) Pursuant to 401 KAR 63:010, Section 4, no one shall allow earth or other material being transported by truck or earth moving equipment to be deposited onto a paved street or roadway.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

2. Testing Requirements:

None.

3. Specific Monitoring Requirements:

The permittee shall monitor the amount of limestone received and processed.

4. Specific Record Keeping Requirements:

a) Records of limestone received and processed shall be maintained.

b) Annual records estimating tonnage hauled for plant roadways shall be maintained for emission inventory purposes.

5. Specific Reporting Requirements:

See Section F.

6. Specific Control Equipment Operating Conditions:

a) The source wet suppression control equipment shall be operated as necessary to maintain compliance with applicable requirements, in accordance with manufacturer's specifications and/or standard operating practices.

b) Records regarding the maintenance and operation of the wet suppression control equipment shall be maintained.

c) See Section E.

SECTION C - INSIGNIFICANT ACTIVITIES

The following listed activities have been determined to be insignificant activities for this source pursuant to 401 KAR 52:020, Section 6. While these activities are designated as insignificant the permittee must comply with the applicable regulation(s). Process and emission control equipment at each insignificant activity subject to a generally applicable regulation shall be inspected monthly and a qualitative visible emissions evaluation made. The results of the inspections and observations shall be recorded in a log, noting color, duration, density (heavy or light), cause and any corrective actions taken for any abnormal visible emissions.

Description	Generally Applicable Regulation
1. Thermal evaporation of boiler cleaning solution	None
2. Gypsum stockpile	401 KAR 63:010
3. Wet ash handling system and ash pond.	None
4. Lime silo and unloading (water treatment plant).	401 KAR 63:010
5. No. 2 fuel oil storage tanks (415,000 gallons constructed prior 1974).	None
6. Gasoline storage tanks (< 10,000 gallons constructed prior to 1974).	None
7. Emergency generators.	None
8. Waste oil burning (from plant maintenance activities) for energy recovery.	None
9. Tanks/vessels storing lubricating, hydraulic, and machining oils and fluids.	None
10. Parts washing.	None
11. Brazing equipment, cutting torches, soldering equipment, and welding equipment.	None
12. Laboratory and vent hoods used exclusively for chemical and physical analyses.	None
13. Paved and unpaved roads and parking lots.	None

SECTION D - SOURCE EMISSION LIMITATIONS AND TESTING REQUIREMENTS

1. As required by Section 1b of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26; compliance with annual emissions and processing limitations contained in this permit, shall be based on emissions and processing rates for any twelve (12) consecutive months.

2. Sulfur Dioxide, nitrogen oxides, particulate, and visible (opacity) emissions, measured by applicable reference methods, or an equivalent or alternative method specified in 40 CFR Chapter I, or by a test method specified in the state implementation plan shall not exceed the respective limitations specified herein.

SECTION E - SOURCE CONTROL EQUIPMENT REQUIREMENTS

Pursuant to 401 KAR 50:055, Section 2(5), at all times, including periods of startup, shutdown and malfunction, owners and operators shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Division which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.

SECTION F - MONITORING, RECORDKEEPING, AND REPORTING REQUIREMENTS

1. Pursuant to Section 1b (IV)1 of the Cabinet Provisions and Procedures for Issuing Title V Permits incorporated by reference in 401 KAR 52:020, Section 26, when continuing compliance is demonstrated by periodic testing or instrumental monitoring, the permittee shall compile records of required monitoring information that include:

a) Date, place as defined in this permit, and time of sampling or measurements;
b) Analyses performance dates;
c) Company or entity that performed analyses;
d) Analytical techniques or methods used;
e) Analyses results; and
f) Operating conditions during time of sampling or measurement.

2. Records of all required monitoring data and support information, including calibrations, maintenance records, and original strip chart recordings, and copies of all reports required by the Division for Air Quality, shall be retained by the permittee for a period of five years and shall be made available for inspection upon request by any duly authorized representative of the Division for Air Quality [Sections 1b(IV) 2 and 1a(8) of the Cabinet Provisions and Procedures for Issuing Title V Permits incorporated by reference in 401 KAR 52:020, Section 26].

3. In accordance with the requirements of 401 KAR 52:020 Section 3(1)h the permittee shall allow authorized representatives of the Cabinet to perform the following during reasonable times:

a) Enter upon the premises to inspect any facility, equipment (including air pollution control equipment), practice, or operation;
b) To access and copy any records required by the permit:
c) Sample or monitor, at reasonable times, substances or parameters to assure compliance with the permit or any applicable requirements.

Reasonable times are defined as during all hours of operation, during normal office hours; or during an emergency.

4. No person shall obstruct, hamper, or interfere with any Cabinet employee or authorized representative while in the process of carrying out official duties. Refusal of entry or access may constitute grounds for permit revocation and assessment of civil penalties.

5. Summary reports of any monitoring required by this permit, other than continuous emission or opacity monitors, shall be submitted to the Regional Office listed on the front of this permit at least every six (6) months during the life of this permit, unless otherwise stated in this permit. For emission units that were still under construction or which had not commenced operation at the end of the 6-month period covered by the report and are subject to monitoring requirements in this permit, the report shall indicate that no monitoring was performed during the previous six months because the emission unit was not in operation [Section 1b (V)1 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].

SECTION F - MONITORING, RECORDKEEPING, AND REPORTING REQUIREMENTS (CONTINUED)

6. The semi-annual reports are due by January 30th and July 30th of each year. Data from the continuous emission and opacity monitors shall be reported to the Technical Services Branch in accordance with the requirements of 401 KAR 59:005, General Provisions, Section 3(3). All reports shall be certified by a responsible official pursuant to 401 KAR 52:020 Section 23. All deviations from permit requirements shall be clearly identified in the reports.

7. In accordance with the provisions of 401 KAR 50:055, Section 1 the owner or operator shall notify the Regional Office listed on the front of this permit concerning startups, shutdowns, or malfunctions as follows:

a) When emissions during any planned shutdowns and ensuing startups will exceed the standards, notification shall be made no later than three (3) days before the planned shutdown, or immediately following the decision to shut down, if the shutdown is due to events which could not have been foreseen three (3) days before the shutdown.

b) When emissions due to malfunctions, unplanned shutdowns and ensuing startups are or may be in excess of the standards, notification shall be made as promptly as possible by telephone (or other electronic media) and shall be submitted in writing upon request.

8. The owner or operator shall report emission related exceedances from permit requirements including those attributed to upset conditions (other than emission exceedances covered by Section F.7. above) to the Regional Office listed on the front of this permit within 30 days. Other deviations from permit requirements shall be included in the semiannual report required by Section F.6 [Section 1b (V) 3, 4. of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].

9. Pursuant to 401 KAR 52:020, Permits, Section 21, the permittee shall annually certify compliance with the terms and conditions contained in this permit, by completing and returning a Compliance Certification Form (DEP 7007CC) (or an alternative approved by the regional office) to the Regional Office listed on the front of this permit and the U.S. EPA in accordance with the following requirements:

a) Identification of the term or condition;

b) Compliance status of each term or condition of the permit;

c) Whether compliance was continuous or intermittent;

d) The method used for determining the compliance status for the source, currently and over the reporting period.

e) For an emissions unit that was still under construction or which has not commenced operation at the end of the 12-month period covered by the annual compliance certification, the permittee shall indicate that the unit is under construction and that compliance with any applicable requirements will be demonstrated within the timeframes specified in the permit.

SECTION F - MONITORING, RECORDKEEPING, AND REPORTING REQUIREMENTS (CONTINUED)

f) The certification shall be postmarked by January 30th of each year and mailed to the following addresses:

Division for Air Quality
Owensboro Region
3032 Alvey Park Dr. W. STE 700
Owensboro, KY 42303-2191

U.S. EPA Region IV
Air Enforcement Branch
Atlanta Federal Center
61 Forsyth St.
Atlanta, GA 30303-8960

Division for Air Quality
Central Files
803 Schenkel Lane
Frankfort, KY 40601

10. In accordance with 401 KAR 52:020, Section 22, the permittee shall provide the Division with all information necessary to determine its subject emissions within thirty (30) days of the date the KYEIS emission survey is mailed to the permittee.

11. Results of performance test(s) required by the permit shall be submitted to the Division by the source or its representative within forty-five days or sooner if required by an applicable standard, after the completion of the fieldwork.

SECTION G - GENERAL PROVISIONS

(a) General Compliance Requirements

1. The permittee shall comply with all conditions of this permit. Noncompliance shall be a violation of 401 KAR 52:020 and of the Clean Air Act and is grounds for enforcement action including but not limited to termination, revocation and reissuance, revision or denial of a permit [Section 1a, 3 of the Cabinet Provisions and Procedures for Issuing Title V Permits incorporated by reference in 401 KAR 52:020 Section 26].

2. The filing of a request by the permittee for any permit revision, revocation, reissuance, or termination, or of a notification of a planned change or anticipated noncompliance, shall not stay any permit condition [Section 1a, 6 of the Cabinet Provisions and Procedures for Issuing Title V Permits incorporated by reference in 401 KAR 52:020, Section 26].

3. This permit may be revised, revoked, reopened and reissued, or terminated for cause in accordance with 401 KAR 52:020, Section 19. The permit will be reopened for cause and revised accordingly under the following circumstances:

a) If additional applicable requirements become applicable to the source and the remaining permit term is three (3) years or longer. In this case, the reopening shall be completed no later than eighteen (18) months after promulgation of the applicable requirement. A reopening shall not be required if compliance with the applicable requirement is not required until after the date on which the permit is due to expire, unless this permit or any of its terms and conditions have been extended pursuant to 401 KAR 52:020, Section 12;

b) The Cabinet or the U. S. EPA determines that the permit must be revised or revoked to assure compliance with the applicable requirements;

c) The Cabinet or the U. S. EPA determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit;

d) If any additional applicable requirements of the Acid Rain Program become applicable to the source.

Proceedings to reopen and reissue a permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of the permit for which cause to reopen exists. Reopenings shall be made as expeditiously as practicable. Reopenings shall not be initiated before a notice of intent to reopen is provided to the source by the Division, at least thirty (30) days in advance of the date the permit is to be reopened, except that the Division may provide a shorter time period in the case of an emergency.

4. The permittee shall furnish information upon request of the Cabinet to determine if cause exists for modifying, revoking and reissuing, or terminating the permit; or to determine compliance with the conditions of this permit [Section 1a, 7,8 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].

SECTION G - GENERAL PROVISIONS (CONTINUED)

5. The permittee, upon becoming aware that any relevant facts were omitted or incorrect information was submitted in the permit application, shall promptly submit such facts or corrected information to the permitting authority [401 KAR 52:020, Section 7(1)].

6. Any condition or portion of this permit which becomes suspended or is ruled invalid as a result of any legal or other action shall not invalidate any other portion or condition of this permit [Section 1a, 14 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].

7. The permittee shall not use as a defense in an enforcement action the contention that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance [Section 1a, 4 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].

8. Except for requirements identified in this permit as state-origin requirements, all terms and conditions shall be enforceable by the United States Environmental Protection Agency and citizens of the United States [Section 1a, 15 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].

9. This permit shall be subject to suspension if the permittee fails to pay all emissions fees within 90 days after the date of notice as specified in 401 KAR 50:038, Section 3(6) [Section 1a, 10 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].

10. Nothing in this permit shall alter or affect the liability of the permittee for any violation of applicable requirements prior to or at the time of permit issuance [401 KAR 52:020, Section 11(3)(b)].

11. This permit does not convey property rights or exclusive privileges [Section 1a, 9 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].

12. Issuance of this permit does not relieve the permittee from the responsibility of obtaining any other permits, licenses, or approvals required by the Kentucky Cabinet for Environmental and Public Protection or any other federal, state, or local agency.

13. Nothing in this permit shall alter or affect the authority of U.S. EPA to obtain information pursuant to Federal Statute 42 USC 7414, Inspections, monitoring, and entry [401 KAR 52:020, Section 11(3)(d)].

14. Nothing in this permit shall alter or affect the authority of U.S. EPA to impose emergency orders pursuant to Federal Statute 42 USC 7603, Emergency orders [401 KAR 52:020, Section 11(3)(a)].

SECTION G - GENERAL PROVISIONS (CONTINUED)

15. This permit consolidates the authority of any previously issued PSD, NSR, or Synthetic Minor source preconstruction permit terms and conditions for various emission units and incorporates all requirements of those existing permits into one single permit for this source.

16. Pursuant to 401 KAR 52:020, Section 11, a permit shield shall not protect the owner or operator from enforcement actions for violating an applicable requirement prior to or at the time of issuance. Compliance with the conditions of a permit shall be considered compliance with:

a) Applicable requirements that are included and specifically identified in the permit and
b) Non-applicable requirements expressly identified in this permit.

17. Pursuant to 401 KAR 50:045, Section 2, a source required to conduct a performance test shall submit a completed Compliance Test Protocol form, DEP form 6028, or a test protocol a source has developed for submission to other regulatory agencies, in a format approved by the cabinet, to the Division's Frankfort Central Office a minimum of sixty (60) days prior to the scheduled test date. Pursuant to 401 KAR 50:045, Section 7, the Division shall be notified of the actual test date at least thirty (30) days prior to the test.

(b) Permit Expiration and Reapplication Requirements

1. This permit shall remain in effect for a fixed term of five (5) years following the original date of issue. Permit expiration shall terminate the source's right to operate unless a timely and complete renewal application has been submitted to the Division at least six months prior to the expiration date of the permit. Upon a timely and complete submittal, the authorization to operate within the terms and conditions of this permit, including any permit shield, shall remain in effect beyond the expiration date, until the renewal permit is issued or denied by the Division [401 KAR 52:020, Section 12].

2. The authority to operate granted shall cease to apply if the source fails to submit additional information requested by the Division after the completeness determination has been made on any application, by whatever deadline the Division sets [401 KAR 52:020 Section 8(2)].

(c) Permit Revisions

1. A minor permit revision procedure may be used for permit revisions involving the use of economic incentive, marketable permit, emission trading, and other similar approaches, to the extent that these minor permit revision procedures are explicitly provided for in the SIP or in applicable requirements and meet the relevant requirements of 401 KAR 52:020, Section 14(2).

2. This permit is not transferable by the permittee. Future owners and operators shall obtain a new permit from the Division for Air Quality. The new permit may be processed as an administrative amendment if no other change in this permit is necessary, and provided that a written agreement containing a specific date for transfer of permit responsibility coverage and liability between the current and new permittee has been submitted to the permitting authority within ten (10) days following the transfer.

SECTION G - GENERAL PROVISIONS (CONTINUED)

(d) Construction, Start-Up, and Initial Compliance Demonstration Requirements

Not applicable.

(e) Acid Rain Program Requirements

1. If an applicable requirement of Federal Statute 42 USC 7401 through 7671q (the Clean Air Act) is more stringent than an applicable requirement promulgated pursuant to Federal Statute 42 USC 7651 through 7651o (Title IV of the Act), both provisions shall apply, and both shall be state and federally enforceable.

2. The permittee shall comply with all requirements and conditions of the Title IV, Acid Rain Permit issued for this source. The source shall also comply with all requirements of any revised or future acid rain permit(s) issued to this source.

(f) Emergency Provisions

1. Pursuant to 401 KAR 52:020 Section 24(1), an emergency shall constitute an affirmative defense to an action brought for the noncompliance with the technology-based emission limitations if the permittee demonstrates through properly signed contemporaneous operating logs or relevant evidence that:

a) An emergency occurred and the permittee can identify the cause of the emergency;
b) The permitted facility was at the time being properly operated;
c) During an emergency, the permittee took all reasonable steps to minimize levels of emissions that exceeded the emissions standards or other requirements in the permit; and
d) Pursuant to 401 KAR 52:020, 401 KAR 50:055, and KRS 224.01-400, the permittee notified the Division as promptly as possible and submitted written notice of the emergency to the Division when emission limitations were exceeded due to an emergency. The notice shall include a description of the emergency, steps taken to mitigate emissions, and corrective actions taken.
e) This requirement does not relieve the source of other local, state or federal notification requirements.

2. Emergency conditions listed in General Condition (f)1 above are in addition to any emergency or upset provision(s) contained in an applicable requirement [401 KAR 52:020, Section 24(3)].

3. In an enforcement proceeding, the permittee seeking to establish the occurrence of an emergency shall have the burden of proof [401 KAR 52:020, Section 24(2)].

SECTION G - GENERAL PROVISIONS (CONTINUED)

(g) Risk Management Provisions

1. The permittee shall comply with all applicable requirements of 401 KAR Chapter 68, Chemical Accident Prevention, which incorporates by reference 40 CFR Part 68, Risk Management Plan provisions. If required, the permittee shall comply with the Risk Management Program and submit a Risk Management Plan to:

RMP Reporting Center
P.O. Box 1515
Lanham-Seabrook, MD 20703-1515.

2. If requested, submit additional relevant information to the Division or the U.S. EPA.

(h) Ozone depleting substances

1. The permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 CFR 82, Subpart F, except as provided for Motor Vehicle Air Conditioners (MVACs) in Subpart B:

a) Persons opening appliances for maintenance, service, repair, or disposal shall comply with the required practices contained in 40 CFR 82.156.

b) Equipment used during the maintenance, service, repair, or disposal of appliances shall comply with the standards for recycling and recovery equipment contained in 40 CFR 82.158.

c) Persons performing maintenance, service, repair, or disposal of appliances shall be certified by an approved technician certification program pursuant to 40 CFR 82.161.

d) Persons disposing of small appliances, MVACs, and MVAC-like appliances (as defined at 40 CFR 82.152) shall comply with the recordkeeping requirements pursuant to 40 CFR 82.166

e) Persons owning commercial or industrial process refrigeration equipment shall comply with the leak repair requirements pursuant to 40 CFR 82.156.

f) Owners/operators of appliances normally containing 50 or more pounds of refrigerant shall keep records of refrigerant purchased and added to such appliances pursuant to 40 CFR 82.166.

2. If the permittee performs service on motor (fleet) vehicle air conditioners containing ozone-depleting substances, the source shall comply with all applicable requirements as specified in 40 CFR 82, Subpart B, *Servicing of Motor Vehicle Air Conditioners*.

SECTION H - ALTERNATE OPERATING SCENARIOS

None.

SECTION I - COMPLIANCE SCHEDULE

Not applicable.

SECTION J - ACID RAIN

ACID RAIN PERMIT CONTENTS

1) Statement of Basis

2) SO_2 allowances allocated under this permit and NO_X requirements for each affected unit.

3) Comments, notes and justifications regarding permit decisions and changes made to the permit application forms during the review process, and any additional requirements or conditions.

4) The permit application submitted for this source. The owners and operators of the source must comply with the standard requirements and special provisions set forth in the Phase II Application and the Phase II NO_X Compliance Plan.

5) Summary of Actions

1) Statement of Basis:

Statutory and Regulatory Authorities: In accordance with KRS 224.10-100 and Titles IV and V of the Clean Air Act, the Kentucky Environmental and Public Protection Cabinet, Division for Air Quality issues this permit pursuant to 401 KAR 52:020, Permits, 401 KAR 52:060, Acid Rain Permit, and Federal Regulation 40 CFR Part 76.

SECTION J - ACID RAIN (CONTINUED)

PERMIT (Conditions)

Plant Name:	Elmer Smith Station
Affected Unit:	E.U. 01 Indirect Heat Exchanger, 1507 mmBtu/hr, cyclone furnace

- **SO_2 Allowance Allocations and NO_x Requirements for the affected unit:**

SO_2 Allowances	**Year**				
	2006	2007	2008	2009	2010
Tables 2, 3 or 4 of 40 CFR Part 73	2804*	2804*	2804*	2804*	2810*

NO_x Requirements	
NO_x Limits	None. Pursuant to 40 CFR 76.6(a)(2), this unit is not subject to nitrogen oxides limitations under Title IV since this cyclone boiler's Maximum Continuous Steam Flow at 100% of Load is less than 1060 thousands of lb/hour.

* The number of allowances allocated to Phase II affected units by the U.S. EPA may change under 40 CFR part 73. In addition, the number of allowances actually held by an affected source in a unit account may differ from the number allocated by U. S. EPA. Neither of the aforementioned conditions necessitate a revision to the unit SO_2 allowance allocations identified in this permit (See 40 CFR 72.84).

SECTION J - ACID RAIN (CONTINUED)

PERMIT (Conditions)

Plant Name: Elmer Smith Station
Affected Unit: E.U. 02 Indirect Heat Exchanger, 2566 mmBtu/hr, tangentially-fired boiler

- **SO_2 Allowance Allocations and NO_x Requirements for the affected unit:**

SO_2 Allowances	**Year**				
	2006	2007	2008	2009	2010
Tables 2, 3 or 4 of 40 CFR Part 73	6211*	6211*	6211*	6211*	6224*

NO_x Requirements	
NO_x Limits	Pursuant to 40 CFR Part 76, the Kentucky Division for Air Quality approves the NO_X emissions averaging plan for this unit. This plan is effective for calendar year 2005 through 2009. Under this plan, this unit's NO_X emissions shall not exceed the annual average NO_X emission rate for each year, determined in accordance with 40 CFR Part 75, shall not exceed the applicable emission limitation, under 40 CFR 76.5(a)(1), of 0.45 lb/mmBtu for a tangentially-fired boiler. In addition to the described NO_X compliance plan, this unit shall comply with all other applicable requirements of 40 CFR Part 76, including the duty to reapply for a NO_X compliance plan and requirements covering excess emissions.

* The number of allowances allocated to Phase II affected units by the U.S. EPA may change under 40 CFR part 73. In addition, the number of allowances actually held by an affected source in a unit account may differ from the number allocated by U. S. EPA. Neither of the aforementioned conditions necessitate a revision to the unit SO_2 allowance allocations identified in this permit (See 40 CFR 72.84).

SECTION J - ACID RAIN (CONTINUED)

PERMIT (Conditions)

- **Comments, Notes, and Justifications:**

  Affected units are one cyclone type boiler and one tangentially fired boiler.

- **Permit Application:**
  The Phase II Permit Application, the Phase II NO_X Compliance Plan, and the Phase II NO_X Averaging Plan are all part of this permit and the source must comply with the standard requirements and special provisions set forth in the Phase II Application, the Phase II NO_X Compliance Plan, and the Phase II NO_X Averaging Plan.

- **Summary of Actions:**

  Previous Actions:

  1. Draft Phase II Permit (# AR-96-09) including SO_2 compliance was issued for public comments on September 19, 1996.

  2. Final Phase II Permit (# AR-96-09) including SO_2 compliance plan was issued on December 11, 1996.

  3. Draft Phase II Permit (# A-98-003) was issued with the 1998 revised SO_2 allowance allocations and NO_X emissions standard for public comment on November 23, 1998.

  4. Final Phase II Permit (# A-98-003) was issued with the 1998 revised SO_2 allowance allocations and NO_X emissions standard on March 2, 2999.

  5. Final Phase II Permit (# AR-96-09) became null and void.

  6. Final Phase II Permit (# A-98-003) that has been issued with the 1998 revised SO_2 allowance allocations and NO_X emissions standard shall become null and void when Proposed Permit Number V-04-050 is issued.

  Present Action:

  Draft Title V with Section J Acid Rain Permit is being advertised for public comment.

SECTION K - NO_X BUDGET

1) Statement of Basis

Statutory and Regulatory Authorities: In accordance with KRS 224.10-100, the Environmental and Public Protection Cabinet issues this permit pursuant to 401 KAR 52:020 Title V permits, 401 KAR 51:160, NO_X requirements for large utility and industrial boilers, and 40 CFR 97, Subpart C.

2) NO_x Budget Permit Application, Form DEP 7007EE

The NO_X Budget Permit application for these electrical generating units was submitted to the Division and received on August 1, 2003. Requirements contained in that application are hereby incorporated into and made part of this NO_X Budget Permit. Pursuant to 401 KAR 52:020, Section 3, the source shall operate in compliance with those requirements.

3) Comments, notes, justifications regarding permit decisions and changes made to the permit application forms during the review process, and any additional requirements or conditions.

Affected units are E.U. 01 cyclonic coal-fired boiler (1507 mmBtu/hr indirect heat exchanger) and E.U. 02 pulverized coal, tangentially-fired boiler (2566.4 mmBtu/hr indirect heat exchanger), due to the applicability of an electric generating unit used to generate 25 megawatts or more of electricity, some of which is offered for sale.

4) Summary of Actions

The NO_X Budget Permit is being issued as part of the renewal Title V permit for this source. Public, affected state, and U.S. EPA review will follow procedures specified in 401 KAR 52:100.